

15. A mirror assembly comprising:
a mirror element having a frame, a mirror surface, and a plurality of hinges;
at least one permanent magnet attached to the mirror element;
a plurality of coil drivers in proximity to at least one permanent magnet for orienting the mirror element;
a body holding a plurality of coil drivers, and to which the mirror element is attached; and
a sensor disposed between the body and the mirror element for detecting the orientation of the mirror, the sensor comprising a plurality of segmented capacitor plates angularly arranged beneath and spaced apart from an underside of the mirror surface, the plurality of segmented capacitor plates being electrically insulated from one another.

16. The mirror assembly of claim 1 wherein the mirror element is formed of a single piece of crystalline material.

17. The mirror assembly of claim 1 wherein the sensor has electrical leads extending from the body for presenting an indication of the orientation of the mirror element.

18. The mirror assembly of claim 1 further comprising a memory for storing calibration values associated with the sensor.

19. The mirror assembly of claim 1 wherein the sensor is of a conical shape such that the segmented capacitor plates are angularly disposed at upper conical surfaces of the sensor.

20. The mirror assembly of claim 1 wherein the body is configured to encase the plurality of coil drivers held by the body.

21. A packaged micro-machined electro-mechanical assembly comprising:
an element having capacitive properties and a surface;
a body encasing the assembly; and
a sensor disposed between the body and the element for detecting the orientation of the element, the sensor comprising a plurality of segmented capacitor plates angularly arranged beneath and spaced apart from an underside of the element surface, the plurality of segmented capacitor plates being electrically insulated from one another.

22 The packaged micro-machined electro-mechanical assembly of claim **21** wherein the element is formed of a single piece of crystalline material.

23 The packaged micro-machined electro-mechanical assembly of claim **21** wherein the element further comprises further has reflective properties.

24. The packaged micro-machined electro-mechanical assembly of claim 21 wherein the sensor has electrical leads extending from the body for presenting an indication of the orientation of the orientation of the element.

25 The packaged micro-machined electro-mechanical assembly of claim **21** further comprising a memory for storing calibration values associated with the sensor.

~~26~~ 26. The packaged micro-machined electro-mechanical assembly of claim ~~24~~ wherein the sensor is of a conical shape such that the segmented capacitor plates are angularly disposed at upper conical surfaces of the sensor.

27. The packaged micro-machined electro-mechanical assembly of claim 21 further comprising at least one magnet attached to the element.

~~28~~ 28. The packaged micro-machined electro-mechanical assembly of claim 27 further comprising a plurality of coil drivers in proximity to the at least one magnet for orienting the element.

Respectfully submitted,

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